

# PATENT ABSTRACTS OF JAPAN

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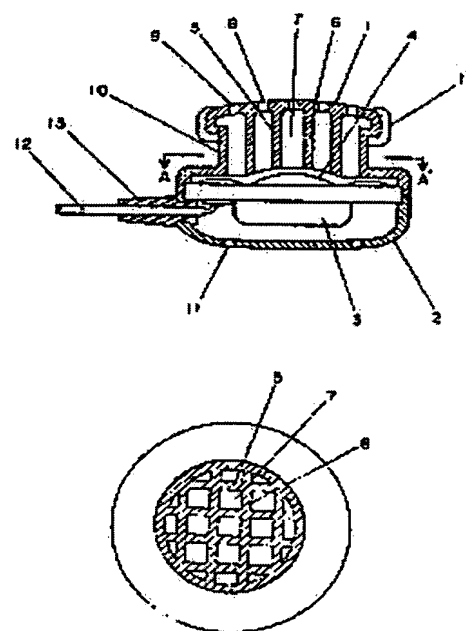
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## (54) HEADPHONE

### (57)Abstract:

**PURPOSE:** To reproduce an ultralow sound difficult for a conventional ear shell insertion type headphone by providing plural sound guides between a housing front part and a speaker unit contained in the housing rear part.

**CONSTITUTION:** Plural sound paths 7 formed by longitudinal/lateral grid barriers 5, 6 are arranged between the housing front part 1 having front sound holes 8, 9 and a speaker unit 3 contained in the housing rear part 2 having a larger diameter than that of the front part 1. Then the sound wave generated from the diaphragm 4 is propagated while being reflected in the sound path 7 and reaches the ear from the front face sound holes 8, 9 without being interfered with the sound from the other sound path 7. Then the diameter of the speaker unit 3 is increased more than the diameter of a conventional headphone. Thus, ultralow sound having been difficult in a conventional ear shell insertion head phone can be reproduced.



## LEGAL STATUS

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